



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/748,350	12/30/2003	Paul Allen Douglas		7809

7590 03/16/2005  
Paul Allen Douglas  
2554 Woodwardia Rd.  
Atlanta, GA 30345

EXAMINER

MCCALL, ERIC SCOTT

ART UNIT PAPER NUMBER

2855

DATE MAILED: 03/16/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/748,350

Applicant(s)

DOUGLAS, PAUL ALLEN

Examiner

Eric S. McCall

Art Unit

2855

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-16 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-16 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 30 December 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 1/18/04
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_

**WHEEL ALIGNMENT SYSTEM FOR SINGLE TRACK VEHICLES**

**FIRST OFFICE ACTION**

**SPECIFICATION**

The lengthy specification has not been checked to the extent necessary to determine the presence of all possible minor errors. The Applicant's cooperation is requested in correcting any errors of which the Applicant may become aware of in the specification.

**CLAIMS**

The Examiner notes that the preamble of all of the independent claims pertaining to “a single track vehicle, in particular a motorcycle or bicycle” have not been given patentable weight because the body of the respective claims do not rely upon the preambles thereof for completeness.

35 U.S.C. § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 2, 4, and 5 are rejected under 35 U.S.C. 102(b) as being anticipated by the admitted prior art of Roberts, Jr. et al. (4,150,897).

With respect to claim 1, Roberts, Jr. et al. teach a method for alignment of front and rear wheels of a vehicle, comprising the steps of:

(a) providing a front reference line (28) perpendicularly from the longitudinal centerline of said front wheel (12a) to one side of said vehicle (fig. 1);

(b) providing a rear reference line (16a) perpendicularly from the longitudinal centerline of said rear wheel (12c) to the same side of said vehicle (fig. 1);

(c) providing a rearward projecting alignment reference line perpendicularly oriented to said front reference line (col. 2, lines 60-64);

(d) providing a forward projecting alignment reference line perpendicularly oriented to said rear reference line (col. 2, lines 64-66); and

(e) aligning said rearward projecting alignment reference line with said forward projecting alignment reference line, so that a common reference plane is formed, with said front

reference line and said rear reference line forming perpendicular transversals between said common reference plane and the longitudinal centerline between said front and said rear wheels, whereby said front wheel and said rear wheel are aligned with each other (col. 4, lines 1-13).

With respect to claim 2, Roberts, Jr. et al. teach an apparatus for alignment of front and rear wheels of a vehicle, comprising:

- (a) a center rib disposed along the longitudinal centerline of said front wheel (12a);
- (b) a center rib disposed along the longitudinal centerline of said rear wheel (12c);
- (c) a front alignment unit including a front alignment strut (28), a front laser module (14), and a front laser target (30a) having an opaque surface;
- (d) means for disposing said front alignment strut perpendicularly to said center rib of said front wheel of said vehicle so that a rearward projecting laser beam from said front laser module, projecting perpendicularly to said front alignment strut will be parallel to the longitudinal centerline of said front wheel (fig. 1);
- (e) a rear alignment unit including a rear alignment strut, and a rear target mirror (16a) having a reflective surface (fig. 1);
- (f) means for disposing said rear alignment strut perpendicularly to said center rib of said rear wheel of said vehicle so that said rearward projecting laser beam will be reflected as a forward projecting laser beam toward said front laser target (fig. 1);
- (g) said rearward projecting laser beam and said forward projecting laser beam being aligned with each other, so as to form a common reference plane parallel to the centerline

Art Unit: 2855

between said front and said rear wheels, whereby said front wheel and said rear wheel are aligned with each other (col. 4, lines 1-13).

With regards to claim 4, Roberts, Jr. et al. suggest disposing the front alignment strut (28) perpendicularly to said center rib of said front wheel (12a) consisting of an outside wheel clamp beam (18a) and threaded rod for clamping said center rib of said front wheel between said front alignment strut and said outside wheel clamp beam (col. 3, lines 15+).

With regards to claim 5, Roberts, Jr. et al. suggest disposing the rear alignment strut (16a) perpendicularly to said center rib of said rear wheel consisting of an outside wheel clamp beam (18c) and threaded rod for clamping said center rib of said rear wheel between said rear alignment strut and said outside wheel clamp beam (col. 3, lines 15+).

35 U.S.C. § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 3 and 6-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over the admitted prior art of Roberts, Jr. et al. (4,150,897).

With regard to claims 3 and 6, Roberts, Jr. et al. teach a laser beam being projected from alongside the front of the vehicle to the rear of the vehicle and reflected back to the front of the vehicle.

Roberts, Jr. et al. fail to teach the opposite of a laser beam being projected from alongside the rear of the vehicle to the front of the vehicle and reflected back to the rear of the vehicle.

Nonetheless, it would have been obvious to one having ordinary skill in the art armed with said teaching to project a laser beam from alongside the rear of the vehicle to the front of the vehicle and reflected back to the rear of the vehicle.

The motivation being that projecting a laser beam from alongside the rear of the vehicle to the front of the vehicle and reflected back to the rear of the vehicle is a mirror image of, and thus of the exact same principle as, the specific teaching of Roberts, Jr. et al. in order to achieve the exact same result. As further evidence, the Applicant has even disclosed these two different approaches as functionally equivalent embodiments which suggests that one approach is not patentably distinct from the other approach.

With regards to claim 7, Roberts, Jr. et al. suggest disposing the front alignment strut (28) perpendicularly to said center rib of said front wheel (12a) consisting of an outside wheel clamp

beam (18a) and threaded rod (col. 3, lines 15+) for clamping said center rib of said front wheel between said front alignment strut and said outside wheel clamp beam.

With regards to claim 8, Roberts, Jr. et al. suggest disposing the rear alignment strut (16a) perpendicularly to said center rib of said rear wheel consisting of an outside wheel clamp beam (18c) and threaded rod for clamping said center rib of said rear wheel between said rear alignment strut and said outside wheel clamp beam (col. 3, lines 15+).

With regards to claim 9, Roberts, Jr. et al. suggest the claimed subject matter thereof as pointed out in the above comments regarding claims 6-8. Furthermore, Roberts, Jr. et al. also inherently suggest a lip disposed along the edge of the front wheel and a lip disposed along the edge of a rear wheel as claimed because the rim of a wheel is well known to have a lip on the outer edge thereof.

With regards to claim 10, Roberts, Jr. et al. teach a front target having an opaque surface and a front laser module disposed to emit a rearward projecting laser beam as was pointed out above.

With regards to claim 11, Roberts, Jr. et al. suggest the front alignment unit positioned an offset distance from the front inside wheel clamp beam via bracket (18a). Furthermore, the offset



distance appears to be equal to “one half the difference in width between said rear wheel and said front wheel” (ie. half the width of the wheel) as claimed.

With regards to claim 12, Roberts, Jr. et al. suggest disposing the front alignment strut (28) perpendicularly to the inside wheel clamp beam of said front wheel (12a) consisting of an outside wheel clamp beam (18a) and threaded rod for clamping said inside wheel clamp beam and said outside wheel clamp beam onto said front wheel (col. 3, lines 15+).

With regards to claim 13, Roberts, Jr. et al. suggest disposing the rear alignment strut (28) perpendicularly to the inside wheel clamp beam of said rear wheel (12a) consisting of an outside wheel clamp beam (18a) and threaded rod for clamping said inside wheel clamp beam and said outside wheel clamp beam onto said rear wheel (col. 3, lines 15+).

With regard to claims 14-16, Roberts, Jr. et al. suggest the claimed subject matter thereof as pointed out above since the said claims are merely a combination of earlier claims addressed above.

**CONTACT INFORMATION**

Any inquiry concerning this communication or earlier communications from the Examiner should be directed to Eric S. McCall whose telephone number is (571) 272-2183.

The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Eric S. McCall  
Primary Examiner  
Art Unit 2855  
March 10, 2005